

**Work Order ID 61710**

Tuesday, August 31, 2010 1:53:29 PM



Page 1

Item ID: D3793-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearshoe

Start Date: 8/31/2010 Start Qty: 10.00



Cust Item ID:

Required Date: 9/7/2010 Req'd Qty: 10.00



Customer:

Reference:

Approvals:

Process Plan: /Date: 10-9-8

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3793	Rev A								

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3793 ☐ Dwg Rev: A ☐ Prog Rev: A ☐ 2-  
Deburr if necessary10-9-8(13)304 .410

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

10-9-8

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

510109109(13)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 61710**

Tuesday, August 31, 2010 1:53:29 PM

Page 2

Item ID: D3793-1

Accept

Revision ID:

Item Name: Wearshoe

Start Date: 8/31/2010 Start Qty: 10.00

Required Date: 9/7/2010 Req'd Qty: 10.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

0.00



Brake NC

NC BRAKE

Memo

0.00

Brake NC

1-Deburr if necessary ☐ 2-Form on Brake as per Dwg D3793 using Jigs ☐ 3-Form  
Joggle on brake using Jig as per Dwg D3793

8/10/09/09

(13)

140

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

8/10/09/09

(43)

150

0.00



Powdercoat

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

Memo

0.00

Powder Coating

START TIME: 10:20 ☐ OVEN TEMPERATURE:  
220° FINISH TIME: 10:50

BR 10-9-10

(13)

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 61710**

Tuesday, August 31, 2010 1:53:29 PM

Page 3

Item ID: D3793-1

Accept

Setup Start

Revision ID:

Stop

Item Name: Wearshoe

Start Date: 8/31/2010 Start Qty: 10.00

Required Date: 9/7/2010 Req'd Qty: 10.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

QC3- Inspect Part Finish

0.00

M 10/09/10

213

QC

Memo

0.00

Quality Control

170

Identify as per dwg &amp; Stock Location

FP-18

0.00

BR 10-9-13

(13)

Packaging

Memo

0.00

Packaging

180

QC21- Final Inspection - Work Order Release

0.00

10/09/10

19

10/09/10

QC

Memo

0.00

Quality Control

BR 10-9-13  
(13)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

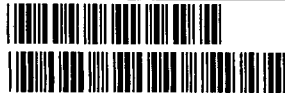
Tuesday, August 31, 2010 1:53:34 PM

Page 1

Work Order ID: 61710

Parent Item: D3793-1

Parent Item Name: Wearshoe





Start Date: 8/31/2010

Required Date: 9/7/2010

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A 08-05-13 new issue DD verified by:EC  
IPP Rev:B 08-05-23 revA as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA  304/316 .040 Sheet		Purchased	No			100	sf	111.7987	0.5902	6.212632	7.7		
											1810-9-8		

Location

Loc Qty

Loc Code

MAT

16.1522

114574

16.1522

MAT20

95.6465

112885

2.7475

113062

0.699

115440

92.2

115440

13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	61710
<b>Description: Wearshoe</b>		<b>Part Number:</b>	D3793-1
<b>Inspection Dwg: D3793 Rev: A</b>		<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.188	+0.005/-0.001	.170	X		V	ISO 2
0.300 x 0.300	+/-0.010	.301 x .301	X		V	<del>ISO 1</del>
1.885	+/-0.010	1.889	X		V	
2.000	+/-0.010	2.000	X		V	
5.00	+/-0.030	5.00	X		T	ISO 1
8.00	+/-0.030	8.00	X		T	
14.00	+/-0.030	14.00	X		T	
20.00	+/-0.030	20.00	X		T	
14.066	+/-0.010	14.066	X		T	
18.983	+/-0.010	18.983	X		T	
23.900	+/-0.010	23.900	X		T	
27.400	+/-0.010	27.400	X		T	
29.400	+/-0.010	29.400	X		T	
32.900	+/-0.010	32.900	X		T	
0.040	+/-0.010	.034	X		V	

<b>Measured by:</b>	PK	<b>Audited by:</b>	S	<b>Prototype Approval:</b>	N/A
<b>Date:</b>	10-9-8	<b>Date:</b>	10/01/69	<b>Date:</b>	N/A

<b>Rev</b>	<b>Date</b>	<b>Change</b>	<b>Revised by</b>	<b>Approved</b>
A	08.05.30	New Issue	KJ/DD	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

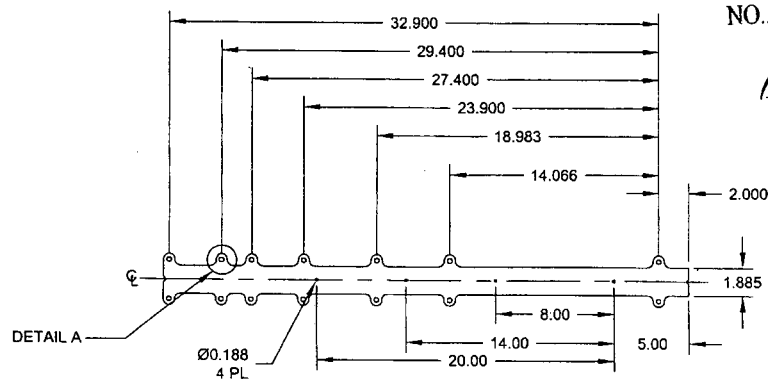
SHOP COPY  
RETURN TO  
ENGINEERING

UNCONTROLLED COPY  
SUBJECT TO AMENDMENT

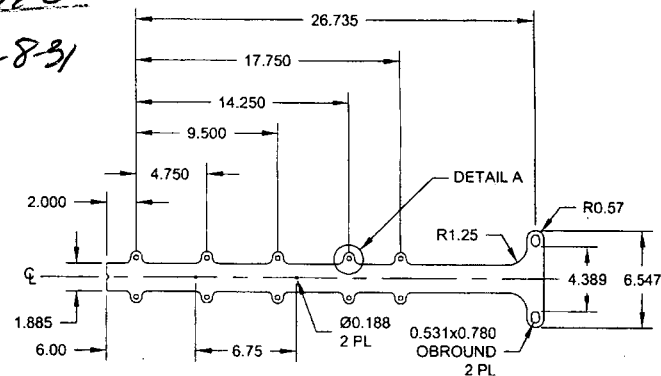
WITHOUT NOTICE  
WORK ORDER

NO. 61710

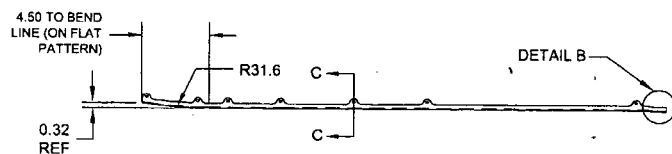
PH10-831



**D3793-1F FLAT PATTERN**



**D3793-3F FLAT PATTERN**



**D3793-1 BEND DETAIL**  
(MAKE FROM D3793-1F)



**D3793-3 BEND DETAIL**  
(MAKE FROM D3793-3F)

RELEASED  
08.05.14

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK)  
(REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "DXXXX-X" ON INSIDE SURFACE USING FINE POINT PERMANENT INK MARKER OR LABEL AFTER FINISH
- 7) WEIGHT: D3793-1 - 0.72 LBS, D3793-3 - 0.66 LBS

A	NEW ISSUE		PH	08.05.14
REV.	DESCRIPTION		BY	DATE
DESIGN	PH	<b>DART AEROSPACE USA, INC</b> PORT HADLOCK, WA		
DRAWN	PH			
CHECKED	PH			
MFG. APPR.	PH		DRAWING NO.	REV. A
APPROVED	PH		D3793	SHEET 1 OF 2
DE APPR.	PH		TITLE	SCALE
DATE	08.05.14	WEARSHOE	NTS	
COPYRIGHT © 2008 BY DART AEROSPACE USA, INC				
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.				

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

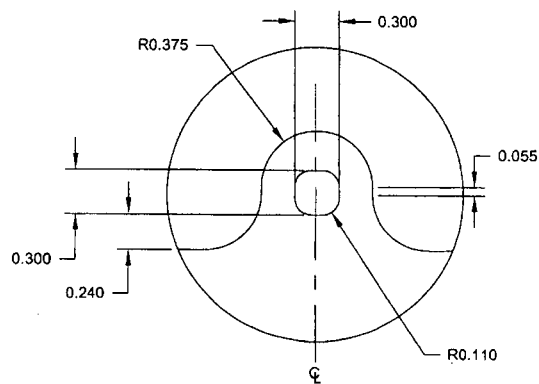
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

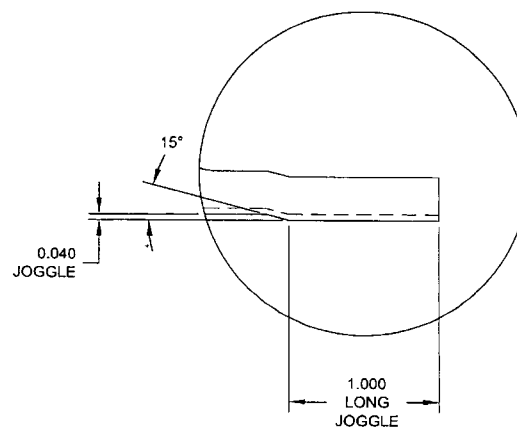
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

8 7 6 5 4 3 2 1

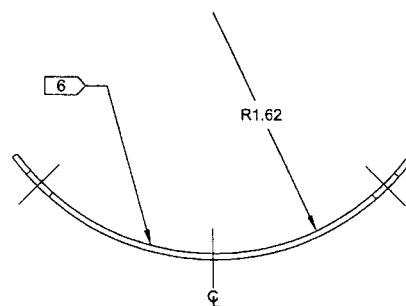


**DETAIL A**  
SCALE 10X



**DETAIL B**  
SCALE 10X

WLO 41710



**SECTION C-C**  
SCALE 10X

**RELEASED**  
08-05-14

DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED	PH	DRAWING NO.	REV. A
MFG. APPR.	PH	D3793	SHEET 2 OF 2
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	NTS
DATE	08.05.14	<small>COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR CONTENT OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries